

Title (en)
ONE-MAGNET RECTANGULAR TRANSDUCER

Title (de)
RECHTECKIGER WANDLER MIT EINEM MAGNETEN

Title (fr)
TRANSDUCTEUR RECTANGULAIRE A UN AIMANT

Publication
EP 1525775 B1 20060412 (EN)

Application
EP 03737947 A 20030718

Priority
• DK 0300502 W 20030718
• US 39811702 P 20020725

Abstract (en)
[origin: WO2004012478A1] An electroacoustic transducer comprising a magnetic circuit of a magnetically conductive material with a pair of opposed surfaces defining a gap there between, the magnetic circuit comprising one magnet. The magnet can either be positioned in the centre of the magnetically conductive material so as to form two gaps. In an alternative embodiment the magnet is attached to the magnetic conductive material forming only one gap. The transducer further comprises a diaphragm and a coil system having electrically conducting paths fastened to the diaphragm. The coil system has portions of its paths situated in the gap. The transducer may be supplied with an additional diaphragm and coil system positioned on the opposite side of the magnetic circuit. In a preferred embodiment the transducer is rectangular. The transducer is suited for integration into miniature components such as mobile communication equipment and hearing aids. Embodiments of the transducer are suited for side-firing or side-shooting applications such as in mobile phones.

IPC 8 full level
H04R 7/08 (2006.01); **H04R 9/02** (2006.01); **H04M 1/03** (2006.01); **H04R 7/04** (2006.01); **H04R 7/12** (2006.01); **H04R 9/00** (2006.01); **H04R 9/04** (2006.01); **H04M 1/247** (2006.01); **H04R 19/00** (2006.01)

CPC (source: EP KR US)
H04M 1/03 (2013.01 - EP US); **H04R 7/06** (2013.01 - KR); **H04R 7/12** (2013.01 - EP US); **H04R 9/047** (2013.01 - EP US)

Cited by
US8135163B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2004012478 A1 20040205; AT E323394 T1 20060415; AT E414394 T1 20081115; AU 2003245867 A1 20040216; CN 1672461 A 20050921; DE 60304578 D1 20060524; DE 60324665 D1 20081224; EP 1525775 A1 20050427; EP 1525775 B1 20060412; JP 2005534238 A 20051110; KR 20040081470 A 20040921; KR 20050034721 A 20050414; US 2004086149 A1 20040506; US 7254248 B2 20070807

DOCDB simple family (application)
DK 0300502 W 20030718; AT 03731663 T 20030124; AT 03737947 T 20030718; AU 2003245867 A 20030718; CN 03817808 A 20030718; DE 60304578 T 20030718; DE 60324665 T 20030124; EP 03737947 A 20030718; JP 2004523739 A 20030718; KR 20047011514 A 20030124; KR 20057001405 A 20050125; US 62137503 A 20030718